

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY FIELD ARTILLERY CENTER AND FORT SILL
Fort Sill, Oklahoma 73503-5100

USAFACFS Regulation
No. 40-557-1

30 September 1991

Medical Services
HEARING CONSERVATION PROGRAM

Further supplementation by subordinate commanders is prohibited, unless approved by Headquarters, USAFACFS.

1. PURPOSE. This regulation establishes and outlines policies of this headquarters for the control of noise hazards and the prevention of hearing loss among military and civilian personnel. This regulation is applicable to all military and civilian personnel who are exposed to hazardous noise. The words his/him as used in this publication are intended to include both the masculine and feminine genders, and any exceptions to this will be so noted.

2. REFERENCES.

a. DOD Instruction 6053.3 establishes a uniform hearing conservation program for the Department of Defense (DOD) components, the provisions of which apply to all DOD personnel and operations worldwide.

b. AR 40-5, Preventive Medicine, prescribes a comprehensive hearing conservation program for all Department of the Army (DA) civilians and military personnel.

c. USAEHA TG 170, Hearing Conservation, establishes the essential elements and guidance for program implementation.

3. GENERAL.

a. The increasing noise levels associated with the diverse and complex modern civilian and military equipment used by DA are causing concern with regard to its adverse effect on the hearing of personnel especially as it affects their personal welfare and ability to perform efficiently. Experience has shown that noise levels from such equipment as handguns or shoulder-fired rifles, artillery weapons, power generators, combat vehicles, construction equipment, helicopters, etc., are of such high intensity that without adequate protection they can cause permanent loss of hearing. Such a loss is frequently not recognized by the individual until it interferes with his ability to understand the speech of others. The longer an individual is exposed to hazardous noise without adequate hearing protection, the greater the risk his auditory sensitivity will deteriorate. Noise-induced hearing loss is a painless, bloodless, and sightless disability. By the time the individual recognizes the problem, the damage is done and is irreversible. However, an

*This regulation supersedes USAFACFS Regulation 40-557-1, 3 May 1983.

effective hearing conservation program will prevent further deterioration of one's hearing ability due to noise exposure.

b. Noise-induced hearing loss secondary to occupational exposure is a major occupational health hazard in the Army today. Significantly, the majority of noise-induced hearing loss is sustained during peacetime and is almost entirely preventable. The installation commander and his staff will initiate and maintain a viable and effective Hearing Conservation Program.

4. POLICY AND PROCEDURES.

a. Noise Measurement and Analysis.

(1) Sound pressure levels will be measured and analyzed to identify all potentially noise hazardous environments. Only acoustically calibrated sound measuring and analyzing equipment which meets or exceeds Type 2 requirements of ANSI S1.4 will be used.

(2) Only personnel trained in the use of equipment may perform noise surveys and determine health risk assessments. Survey and Health Risk Assessment (HRA) procedures are detailed in TB Med 503 and TB Med 504.

(3) Identified noise hazardous areas and operations will be resurveyed at least annually and within 30 days of any changes in the operational activities. The evaluation will be annotated on DD Form 2214 (Noise Survey).

(4) Exposure criteria.

(a) Levels of steady noise of 85 decibel "A" weighting scale (dBA) or greater are considered hazardous regardless of duration of exposure for the purpose of administering a hearing conservation program.

(b) Levels that exceed 140 decibel peak (dBP) are considered hazardous. All small arms used by the Army produce impulse noise levels above 140 (dBP). Hearing conservation measures must be instituted and enforced when firing any weapon during training.

b. Caution Signs and Labels.

(1) Each noise hazardous area shall be posted conspicuously with appropriate caution signs. These signs and decals alert the worker and visitor that a noise hazard exists and that proper precautions are to be taken. Exteriors of military combatant equipment may be excluded from this requirement.

(2) Signs will be proportioned and color-coded in accordance with AR 385-30 and CFR 1910.144-145. The provisions of these signs are the responsibility of the Installation Safety Officer (see USAFACFS Supplement 1 to AR 420-70, 29 Jul 82).

(3) Caution decals for individual pieces of equipment and aircraft are available in the Federal Supply System (see appendix A).

(4) Erection and maintenance of decals and signs are a unit/shop responsibility.

c. Engineering Control Measures.

(1) The most desirable hearing conservation measure is reducing the noise levels at the source and eliminating harmful health effects. Implementation should be considered if technologically, operationally feasible, and cost effective.

(2) Procurement of new equipment or facilities offers the optimum opportunity for implementing noise control. Safe noise limits can be inserted into equipment specifications as a performance requirement. Inserting noise limits into the procurement specifications increases the probability of designing a quieter equipment.

d. Personal Hearing Protection Device (HPD's).

(1) Each organization will issue personal hearing protection devices at no expense to all personnel who work in designated noise hazardous areas. The individual will have freedom of choice in selecting HPD's from the Surgeon General's approved list. Hearing protective devices, authorized by the Office of the Surgeon General are listed in appendix B.

(2) Preformed hearing protective devices shall be fitted and issued under medical supervision and size entered on the DD Form 2215 (Reference Audiogram). Since ear canals vary widely in size and shape, it is essential that all sizes of hearing protective devices are made available (see appendix B).

(3) HPD's must be worn in steady noise when levels are 85 dBA or greater. When personnel are exposed to steady noise levels above 108 dBA, the wearing of earplugs and ear muffs together is required. Exposure to steady noise levels above 118 dBA requires that hearing protection be worn in combination and that a limitation be placed on daily exposure time.

(4) HPD's must be worn when impulse noise levels exceed 140 dBP. Exposure to impulse noise in excess of 165 dBP requires the wearing of earplugs in combination with either ear muffs or a noise-attenuating helmet. The actual protection combination will be directed by findings of an on-site analysis conducted by the MEDDAC Audiologist and/or industrial hygienist.

(5) All personnel working in or entering designated noise hazardous areas will have hearing protective devices appropriately worn. Because all military personnel are exposed to hazardous noise levels at some time during their military duties, all individuals entering active duty must be fitted with

and retain possession of a pair of earplugs as an item of individual equipment. Personnel on active duty not having a pair of approved, preformed earplugs in their possession will be fitted with an issued set of earplugs prior to further noise exposure. Civilians scheduled for employment in noise hazardous areas or operations will be fitted at the time of their preplacement audiometric evaluation or prior to beginning their duties. Other nonhazardous duties shall be assigned to them by their supervisor pending such evaluation and receipt of appropriate protection devices to comply with statutory law (OSHA).

(6) Combat scenarios.

(a) Personnel exposed to hazardous noise levels may and should wear hearing protectors, especially when firing weapons or riding noisy vehicles. Hearing protectors prevent permanent and temporary threshold shifts which impair the ability to communicate and detect quiet combat sounds, and improve readiness.

(b) In combat, personnel should not wear hearing protectors when they impair necessary hearing; for example, dismounted infantry operations.

e. Monitoring Audiometry.

(1) Monitoring audiometry detects changes in an individuals hearing sensitivity. This information is used to evaluate the effectiveness of the hearing conservation program and identify individuals who are highly susceptible to noise-induced hearing loss.

(2) All military personnel will receive reference or baseline and termination audiograms; all personnel working in noise hazardous activities must receive, at minimum, reference or baseline, annual, and termination audiograms. Testing will be by units which requires appropriate coordination between the Hearing Conservation Center and the training sections of each major subcommands.

(3) Reference/baseline audiograms for new employees and soldiers should be performed as soon as possible. Termination audiograms must be conducted as part of outprocessing. It is recommended that termination audiograms be conducted at least 1 week prior to the civilian employee terminating or soldier leaving the military service.

(4) The Hearing Evaluation Automated Registry System (HEARS) is the only authorized audiometer for use in the Hearing Conservation Program. The HEARS, as part of the Occupational Health Management Information System (OHMIS), provides input into the Army-wide occupational health data base.

5. PROGRAM RESPONSIBILITIES.

a. MEDDAC Commander will--

(1) Establish and update hearing conservation policies and instructions.

- (2) Supervise medical aspects of the hearing conservation program to include establishing health standards and monitoring of compliance with those standards.
- (3) Evaluate potentially noise hazardous operations and advise commanders when hearing protective devices should be worn.
- (4) Maintain current inventory of noise hazardous areas, operations, and equipment including the types of hearing protective devices required for use.
- (5) Coordinate with safety personnel to post each noise hazardous area with warning signs.
- (6) Conduct supervised preplacement and audiometric evaluations on all personnel assigned to potentially noise hazardous areas. Department of the Army civilians will be tested in conjunction with the Occupational Health physical.
- (7) Establish a periodic unit audiometric testing program for personnel in noise hazardous areas.
- (8) Initiate profiles and make recommendations for duty restrictions and reclassification actions IAW AR 40-501, chapter 9, and AR 600-200, paragraph 2-6(1), respectively.
- (9) Seek assistance from the U.S. Army Environmental Hygiene Agency to furnish administrative and technical assistance, coordinate program elements, and provide guidance and review.
- (10) Assist commanders and supervisors in the training of soldiers and employees to comply with the hearing conservation program.
- (11) Train soldier to conduct all areas of required medical surveillance for the hearing conservation program.
- (12) Make appropriate recommendations to reduce and control hazardous noise levels based on survey results.
- (13) Provide assistance to DEH in plans review for construction projects to ensure Occupational Health measures are adequate and in compliance with applicable standards.
- (14) Participate as a member of the Fort Sill Safety Committee to discuss relevant hearing conservation measures.
- (15) Provide educational materials on hazards of occupational noise and the use of hearing protective issues.
- (16) Perform consultations to include technical information briefings and administrative assistance.

(17) Report all Department of the Army civilians suffering reportable hearing threshold shifts or newly identified noise-induced hearing losses on DA Form 3075 (Occupational Health Daily Log) and DA Form 3076 (Army Occupational Health Report).

b. The Civilian Personnel Officer will--

(1) Ensure that applicants for jobs in noise hazardous areas receive preplacement or pretransfer audiometric evaluations, if selected.

(2) Take appropriate personnel placement action when notified by Cdr, USAMEDDAC, that an individual has sustained a progressive hearing loss which will be aggravated by continued additional noise exposure.

(3) Provide advice and assistance to first line supervisors in enforcing the use of safety equipment such as hearing protective devices.

c. The Safety Director will--

(1) Monitor the use of hearing protective devices to assure compliance with this regulation.

(2) Include hearing conservation issues in the Fort Sill MEDDAC Safety Committee minutes.

d. The Directorate of Engineering and Housing will--

(1) Coordinate with Chief, Preventive Medicine Activity, to determine the existence of noise hazardous areas and equipment, and control entrance thereto by notifying Post Safety to provide color-coded caution signs and decals in accordance with AR 385-30, designating the area or equipment as noise hazardous.

(2) Whenever feasible, conceive and initiate action to implement engineering controls to reduce hazardous noise to acceptable levels during the construction or repair of a real property facility.

e. Chief, Range Control will--

(1) Ensure that IAW AR 385-63 (Policy and Procedures for Firing Ammunition for Training, Target Practice, and Combat) the Officer In Charge (OIC) of each firing range/point, together with other range control personnel, is responsible for the enforcement of the wearing of hearing protection.

(2) Ensure that the OIC and/or other range personnel will remove any personnel without hearing protection from the firing line/point. Before returning to the firing line, these personnel will be properly fitted with hearing protective devices.

(3) Participate as member of Fort Sill's Occupational Safety and Health Committee.

f. The Occupational Safety and Health Committee will--

(1) Provide a formal and official means of informing the Commanding General, U.S. Army Field Artillery Center and Fort Sill (USAFACFS); Assistant Commandant, U.S. Army Field Artillery School; Commander, III Corps Artillery; major troop commanders; and installation directors of the status of the Command Hearing Conservation Program.

(2) Evaluate the effectiveness of the Command Hearing Conservation Program and advise appropriate directions for improvement.

(3) Develop policies for implementing the Hearing Conservation Program.

(4) Review surveys, reports, and data concerning the state of the art in hearing conservation.

(5) Have committee minutes recorded and submitted to Cdr, USAFACFS, for approval.

(6) The frequency of meetings may be determined by the chairman. The location will be specified by the chairman.

g. Commander, U.S. Army Field Artillery Training Center (USAFATC), Fort Sill, will--

(1) Ensure USAFATC personnel comply with Fort Sill Hearing Conservation Program.

(2) Ensure hearing protective devices are used during noise hazardous training.

h. Assistant Commandant, U.S. Army Field Artillery School (USAFAS) will--

(1) Ensure hearing protection devices are procured as required and that these devices are used during noise hazardous training.

(2) Ensure that student personnel receive preplacement or pretransfer audiometric evaluation.

i. Commanders/activity directors will--

(1) Ensure that military and civilian personnel working in noise hazardous areas are provided audiometric evaluations annually.

(2) Ensure that personnel and visitors who enter noise hazardous areas and vehicles wear hearing protective devices during the period they remain in such an area or vehicle.

(3) Ensure that earplugs and earplug carrying cases are available for military personnel.

(4) Ensure that a hearing conservation class is part of the commander's and activity director's overall Safety and Health Education Program.

(5) Appoint a hearing conservation monitor to serve as point of contact for the USAMEDDAC Hearing Conservation Program (battalion S3 Officers and Battery Safety Officers are suggested to be Points of Contact).

(6) Notify the Safety Director, USAFACFS, and/or Chief, Preventive Medicine Activity, of any suspected hazardous noise levels in their shops or areas. This will be accomplished by forwarding a Memorandum For Record (MFR) to the Audiology Clinic, ATTN: Hearing Conservation, Building 4300.

(7) Ensure that personnel under their jurisdiction comply with requirements for annual audiometric testing and the wearing of hearing protective devices.

(8) Refer civilians under their jurisdiction to Occupational Health Clinic for hearing problems or complaints associated with the wearing of hearing protection devices. Military personnel will be referred to their appropriate Troop Medical Clinic, Hearing Conservation Center, or Audiology Clinic at Reynolds Army Community Hospital.

(9) Ensure civilian recruitment actions for positions in noise hazardous areas are clearly annotated so that preplacement audiometric evaluations can be completed for the selectee.

j. Civilians or military personnel employed in noise hazardous areas and/or have been identified with known noise hazardous jobs per MOS/job description will--

(1) Exercise all necessary precautions, and wear authorized and properly fitted hearing protective devices when exposed to hazardous noise levels.

(2) Report for all scheduled medical examinations, evaluations, and treatments, as well as health education briefings concerning the hazards of noise and the proper use of hearing protection devices.

(3) Comply with recommendations of medical and safety personnel regarding hearing protection and the maintenance of hearing protection devices.

k. Off duty military and retired personnel utilizing Fort Sill recreational, automotive and craft facilities will exercise all necessary precautions and wear authorized properly fitted hearing protective devices when exposed to hazardous noise levels.

6. PROGRAM EVALUATION.

a. Each installation's hearing conservation program is evaluated by external and internal sources to assess program effectiveness.

b. The Bio-Acoustic Division of the U.S. Army Environmental Hygiene Agency, Aberdeen Proving Ground, Maryland, will conduct installation hearing conservation surveys as part of the Occupational Health Program Review.

c. The HEARS manager's module is authorized for use only by the Installation Hearing Conservation Program Manager. It allows the manager to evaluate program participation, quality assurance, and program effectiveness.

APPENDIX A

TABLE OF COLOR-CODED CAUTION DECALS

Caution decals, designed for individual pieces of equipment, are available in the Federal Supply System.

a. Aircraft, caution decals:

NSN 7510-00-629-6637

NSN 7510-00-629-6638

(Refer to TB 746-93-2 for specific placement instructions.)

b. Other, noise hazardous equipment decals:

NSN 9905-00-198-2728

NSN 7690-00-510-0365

APPENDIX B

CURRENTLY AVAILABLE HEARING PROTECTION DEVICES

CASE, Earplug, Plastic, NSN 6515-00-299-8287

EARPLUGS:

Plug, Ear, Hearing Protection, Single-Flange, 248
NSN 6515-00-442-4765 (extra small, white)
NSN 6515-00-467-0089 (medium, international orange)
NSN 6515-00-442-4807 (large, blue)
NSN 6515-00-442-4813 (extra large, red)
Plug, Ear, Hearing Protection, Triple-Flange, 24S
NSN 6515-00-442-4821 (small, green)
NSN 6515-00-442-4818 (regular, international orange)
NSN 6515-00-467-0092 (large, blue)
Plug, Ear, Hearing Protection, Universal Size, 400S
NSN 6515-00-137-6345 (yellow/white)

EAR-CANAL CAPS:

Plug, Ear, Plastic, Hearing Protection, Universal Size, Single-Flange
NSN 6515-00-392-0726
Plug, Ear, Hearing Protection, Universal Size, 12S
NSN 6515-01-059-1821

EAR MUFFS:

Aural Protectors, Sound, Type II
NSN 4240-00-022-2946

HELMETS:

Helmet, Flyers, Crash Type (SPH-4)
NSN 8415-00-144-4981 (regular)
NSN 8415-00-144-4985 (extra large)
NSN 8415-00-143-8577 (replacement seal, plain)
Helmet, Combat Vehicle Crewmans (DH-132)
NSN 8415-00-094-2679
NSN 8415-00-094-2684
NSN 5965-00-135-0505 (replacement seal, plain)

(HSUA)

FOR THE COMMANDER:



OFFICIAL:

MARSHALL R. MCREE
Colonel, FA
Chief of Staff

ANDREW J. KEOH, JR.
Director of Information Management

DISTRIBUTION:

A

DOIM Pubs Sup Sec (200)
Audiology, RACH (50)